KOKS-FM, POPLAR BLUFF

EXHIBIT 6

FCC REPORT OF M MOFFITT AND K. RAINES

FEDERAL COMMUNICATIONS COMMISSION

Docket No. 92-122 Exhibit No. KoKS 6

Presented by KoKS

Identified 11/12/92

Disposition: Received _____

Rejected _____

Reporter B. Lord

Date _____

COPY

REPORT OF FM BLANKETING INTERFERENCE

ATTRIBUTED TO KOKS - POPLAR BLUFF, MO

DECEMBER 29, 1989

REPORT ON FM BLANKETING INTERFERENCE ATTRIBUTED TO KOKS - POPLAR BLUFF, MO

Engineer G. Michael Moffitt and Public Affairs Specialist Karen Raines arrived in Poplar Bluff late on Monday December 11, 1989. No one was forewarned of the trip.

Field strength measurements were taken Tuesday, December 12, 1989 about 9:00 am. The measurements were taken about 1/2 mile from the tower and transmitter site. The second harmonic was measured to be suppressed 89.9 db. After completing field strength measurements, a complete inspection of the radio station was performed. Please see Attachment A for a complete copy of the inspection report.

After the inspection of the station, appointments were made to view the interference at various homes. Appointments were made with six of the seven complainants Bob Greenberg had called on October 20, 1989: Mrs. Ted Adams, Mr. & Mrs. Jim Farley, Mrs. William Gray, Mr. & Mrs. Pat Smittle, Mr. & Mrs. Wayne Kearby and Mr. & Mrs. Mike Pennington. The seventh complainant, Mrs. Iza Neal, stated she had replaced her antenna and was no longer receiving the interference. Appointments were also made with Mrs. Dorris Smith and Mr. & Mrs. Bill Hillis. The locations of the homes visited are plotted on a map. See attachment B.

The following is a list of the off-the-air TV stations desired by the complainants:

WPSD-TV, channel 6, Paducah, KY

KAIT-TV, channel 8, Jonesboro, AR

KFVS-TV, channel 12, Cape Girardeau, MO

KPOB-TV, channel 15, Poplar Bluff, MO

As can be seen on attachment C, the direction of the stations from Poplar Bluff varies by as much as 145 degrees. Each of the complainants are using highly directional antennas and most are installed in a fixed position. These directional antennas are not designed to receive stations that are separated this much.

At each residence video recordings were taken of the interference with KOKS on the air. The station was directed to go off the air. Mr. Moffitt would verify that KOKS had ceased transmitting by using an IFR 1200 receiver in the MADF vehicle. Video recordings were then made of television reception with KOKS off the air. The station would remain off until told they could resume operation. Still pictures were also taken of the complainants antenna systems. See attachment D.

Where the current antenna installation allowed, filters were tried to see what affect they had on the interference.

Many of the complainants are experiencing severe ghosting on some channels, especially channel 15. Most attributed this ghosting to KOKS. It is probable that some of the ghosting is the result of the construction of the tower that the KOKS antenna is mounted on, but the ghosting is not caused by the operation of the transmitter.

Also, several of the complainants experienced intermittent interference on some channels during the testing. This interference was a herringbone pattern. Its intermittent nature indicated two-way radio transmissions.

Most of those receiving the intermittent interference are within a mile of the Highway Patrol station. The Patrol is authorized under license KAA270 for 15 kilowatts in the 42 MHz band. Operation in this band is a source of interference to the television intermediate frequency (IF) and would explain the intermittent interference witnessed.

Some electrical interference was witnessed; this was most pronounced on channel 6. FM receivers experienced some interference from KOKS. This was most noticeable in the lower portion of the FM band.

The following text describes in detail the antenna system in use at each of the homes visited. It also describes the television picture quality with station KCKS both on and off the air.

Mr. & Mrs. Smith: 2:30 pm Tuesday, December 12, 1989

The tower, antenna and transmitter are located on the property adjacent to the Smith property. The guy wires of the tower go right up to the property line. The antenna is in a fixed position, directed towards Cape Girardeau, and could not be rotated. 300 ohm twin lead runs to the television. There are no filters in line. The antenna is pointed at the KOKS tower; this is necessary to receive channel 12 from Cape Girardeau and channel 6 out of Paducah, Kentucky.

The television is a Magnavox floor model. The antenna system consists of twin lead connected to an antenna. The antenna was installed last winter but the twin lead was not replaced at that time. There is no booster, rotor or filter in the antenna system. It has a Nintendo attached in-line via a built in RF combiner. Baluns are attached on the input and output of the combiner to accommodate the twin lead.

Television reception with KOKS on the air:

channel 6	- Taso _ -	totally blank screen
channel 8	- Taso 5 -	very snowy, sometimes can't get channel 8 because supposedly there is not enough signal for the television to tune to electronically. They have to manually tune in channel 8.
channel 12	- Taso 3 -	snowy picture
channel 15	- Taso 3 -	ghosting, grainy with KOKS audio faintly the back ground. The volume control had no affect on interference.

Television reception with KOKS off the air:

channel 6	- Taso 5 -	no picture, extremely snowy
channel 8	- Taso 4 -	extremely snowy, unwatchable picture
channel 12	- Taso 3 -	snowy, slight improvement
channel 15	- Taso 3 -	ghosting, grainy

The Smith's television has a problem in the tuner.
The television was tuned to channel 8 when KOKS stopped transmitting and channel 8 came in very well. Mrs. Smith proceeded to switched to the other channels. When we came back to channel 8, Mrs. Smith still had to manually switch to channel 8 and the picture was very unclear with red horizontal lines.

The Smiths also have a Sony black/white portable television with rabbit ear antennas. It has no filters. It had a sharper picture than the console.

Interference is also being received on an early 1970's Magnavox stereo, from 88.00 MHz up to 94.00 MHz then again from 106.0 and up. Mrs. Smith was asked what FM stations she is unable to receive. She responded that once when KOKS had been off the air, she had picked up around 8 stations on the lower end of the dial. She did not mention any specific stations she wished to receive. KOKS has not attempted any filtering of the FM receiver.

Mr. & Mrs. Smith have filed a lawsuit against KOKS. Since the lawsuit was filed, on the station attorney's advice, KOKS has done little to work with the Smiths. Last winter Mr. Lampe became the contract chief engineer for KOKS and he spoke with Mrs. Smith. He states she did not want anything to do with the station. During the visit to her home, Mrs. Smith stated she wanted a "qualified" engineer to put the filter on her system - not Mr. or Mrs. Stewart.
The law suit asks that radio station be restrained from causing interference to any electronic device. It was denied in Circuit Court and is now on appeal at the Missouri Appellate Court.

She also called the hotel and requested that Mr. Moffitt and Ms. Raines stay in Poplar Bluff until she put in coaxial wiring. She wanted Mr. Moffitt to put the filter on. She also mentioned that she was now receiving KKLR on channel 8. KKLR is another Poplar Bluff station which recently went to 100 kw. No one else is receiving this interference. She does not reside in the blanketing contour for KKLR.

Summary: The antenna system lacks a filter, rotor and coax cable necessary for proper reception of the desired signals in a high RF field . The TV tuner is intermittent and needs repair.

Mr. & Mrs. Hillis: 3:45 pm Tuesday, December 12, 1989

Their Zenith floor model television has twin lead from the antenna. There is a splitter and they have coax running to the basement. The splitter is attached to the television with a balun which was loose, every time it was touched, it affected the picture. The Hillis' stated sometimes they receive KOKS audio over the television, but KOKS was never heard during the visit. The rotor to the antenna is broken and the antenna mast is leaning away from the house. This causes the antenna to point upward approximately 15 degrees. The antenna could be rotated by manually turning the antenna mast from outside the home. There is no filter installed.

They also has a satellite dish. It is connected via an A/B switch. The picture (channel 4) is good. There is a motor-like hum that faded in and out. The Hillis' blamed KOKS for this interference though it is still present with KOKS off the air.

Television reception with KOKS on the air:

channel 4	- Taso 2 -	(satellite receiving) good picture, loud audio hum
channel 6	- Taso _ -	no picture
channel 8	- Taso _ -	no picture
channel 12	- Taso 3 -	decent but grainy picture
channel 15	- Taso 4 -	color fades in and out, extreme ghosting

Television reception with KOKS off the air:

channel 4	- Taso 2 -	(satellite receiving) good picture, loud audio hum
channel 6	- Taso 3 -	snowy picture, no color
channel 8	- Taso 4 -	very snowy picture
channel 12	- Taso 3 -	little if any improvement
channel 15	- Taso 4 -	was slightly better, extreme ghosting

With the station back in operation, the installation of an FM trap resulted in a picture on channel 8 with a Taso 4. The filter did not help 6 or 12.

The Hillis' kept insisting KOKS had not gone off the air because the stereo light had not gone off on their Magnavox stereo. This occurred only once during the testing. It was attributed to a malfunction of their stereo receiver as Mr. Moffitt verified with every test the station has ceased transmitting.

The Hillis' are also receiving interference on a early 1970's Magnavox stereo (similar to Smiths) and are receiving KOKS in the same areas on the dial. They had listened to KEZS-FM 102.9 licensed to Cape Girardeau but can no longer receive it. KOKS has done nothing with the FM receiver.

They were also receiving interference on:

AT&T wall telephone: with re-dial, mute, loud and soft ringer. You could also switch between touch tone and rotary dial. The Hillis' stated the phone company had taken the phone apart several times and put in different filters. None of them worked. When the phone is first picked up, KOKS can be heard faintly in the background. Once any of the numbers are push KOKS comes in much louder.

Casio CT-360 organ: KOKS on the speakers. The main volume control on organ had no control on the interference. There is a separate volume control for the accompaniment. This control had a direct affect on the interference level.

Sears portable tv: This is used as a monitor for a TI-99 computer. There was no picture distortion; however, KOKS audio can be heard.

Summary: The Hillis' antenna system needs to have repairs made to the splitter balun and rotor as well as installing coaxial cable and filter. With these changes, the Hillis' should be able to pick up the wanted television stations. The interference to the Magnavox stereo could be corrected with filters. The elimination of the interference on the other electronic equipment would require internal modification.

Mrs. Ted Adams: 8:00 am Wednesday, December 12, 1989

The antenna is mounted in a fixed position, directed towards Cape Girardeau, and can not be rotated. The antenna is on a tower shared with her neighbors. Shielded twin lead cable runs down the tower, with the shield left ungrounded. The shielded twin lead is connected to unshielded twin lead which runs underground to the Adams' home. The twin lead from the antenna ends with a short piece of twin lead (which looked to be the proper length for a stub tuned filter) at the connection to an amplified splitter.

One output of the splitter is connected to A/B switch with other input from satellite dish, output to RCA VCR and VCR to VHF input of a Sears television. The UHF antenna is a loop with aluminum foil at the top. Another output of the amplified splitter goes to an A/B switch with the satellite receiver for the television in kitchen, via 75 ohm coax. The splitter has four outputs: 2 go to televisions, one is unterminated and the fourth has a resistor across it.

Mrs. Adams stated the television repairman, Gene Phillips, installed the system the way it is now. She also stated he tried coaxial cable and a tunable trap but took the cable out when the reception was not improved. She also stated during this time the in-line amplifier had been temporarily taken out.

Television reception with KOKS on the air:

position 2	- Taso 3 -	extreme ghosting with intermittent two-way interference
position 3	- Taso 3 -	ghosting, no color
position 6	- Taso _ -	no picture
position 8	- Taso 4 -	extreme ghosting, same intermittent interference channel 2
position 12	- Taso 3 -	fuzzy, not a sharp picture

Television reception with KOKS off the air:

position 2	- Taso 3 -	color, otherwise no change
position 3	- Taso 3 -	no change
position 6	- Taso 3 -	no color, fair picture, same intermittent interference
position 8	- Taso 4 -	snow, extreme ghosting, same intermittent interference as on other channels
position 12	- Taso 3 -	picture sharper, decent picture

Each position can be tuned to any channel. Channel 15 was tuned in on position 2 and 3.

Mrs. Adams lives directly across the highway from the Missouri Highway Patrol station which operates a base transmitter. This explains the severity of the intermittent interference witnessed.

During our visit with Mrs. Adams, Mrs. Smith called. She knew KOKS did something different because she could get channel 8 on her portable and she never got it. At that point, Mr. Moffitt and Ms. Raines went back to where the field strength measurements had been taken the day before and took measurements again. The measurements came out the same as the day before.

Summary: This system has so many splices that good reception is not possible as it is now. The installation of coaxial cable, rotor and filter should give her good reception.

Mr. & Mrs. Jim Farley: 10:00 am Wednesday, December 13, 1989

The antenna was mounted on a working rotor. 75 ohm coax was run to the antenna.

They have a Zenith television and Panasonic VCR which was not connected. The television is also used as a monitor for a Commodore computer. They are using coaxial cable. The television has twin lead connected to the UHF terminal but it hung loose. The television input from A/B switch, one input comes from computer and the other runs through the floor to the antenna (we think, Mr. Farley had been put in the hospital for observation the day before and was the one familiar with the antenna system). There was no filter in line.

Television reception with KOKS on the air:

channel 6	- Taso _ -	no picture
channel 8	- Taso 3 -	snowy picture until turned antenna toward the station got a fair picture without a filter.
channel 12	- Taso 3 -	some herringbone interference which came and went like two-way interference, good picture
channel 15	- Taso 3 -	good picture, slight ghosting, same two-way interference

Television reception with KOKS off the air:

channel 6	- Taso 3 -	fair picture
channel 8	- Taso 3 -	ghosting until rotated the antenna toward channel 8, then received a good picture
channel 12	- Taso 2 -	good picture
channel 15	- Taso 3 -	good picture, slight ghosting, some intermittent interference

There was a rotor on the antenna. A sharper picture with no ghosting is received when the antenna is pointing in the direction of the station they are trying to receive.

With a 3367 FM trap, manufactured by Microwave Filter Company, Inc., in-line: (no video recording of channels 8, 12 and 15 was made)

channel 6	- Taso 3 -	decent picture
channel 8	- Taso 2 -	good picture
channel 12	- Taso 2 -	good picture
channel 15	- Taso 2 -	good picture

The Farleys moved into the area December of 1988. They had never received channel 6 so did not know what it was like before. Later that evening, Mike Moffitt spoke with Mr. Farley. KOKS had given them a filter last January but it did not work. He had not tried it since. Mr. Farley was wondering why the filter would now work. Last winter KOKS was reportedly having trouble with excessive harmonics. The problem has been corrected so the filter now works. Mr. Farley is a retired TV repairman (from California) and is also an amateur operator.

Summary: This system with coaxial cable, rotor and the reinstallation of a filter receives all the stations desired. This is a model system for receiving weak signals in a high RF field.

Mrs. William Gray: 12:30 pm Wednesday, December 13, 1989

The antenna was in a fixed position directed towards Cape Girardeau. They have a Zenith 19" with Magnavox VCR and Nintendo attached. There is twin lead (300 ohm) from the antenna to a balun connected to the Radio Shack FM trap filter then coax to VCR; out of VCR to Nintendo switch to a balun to terminals on the television.

Television reception with KOKS on air:
VCR as tuner:

channel 6	- Taso 3 -	decent picture, some intermittent interference
channel 8	- Taso 4 -	herringbone patterns
channel 12	- Taso 2 -	good picture
channel 15	- Taso 2 -	slight ghosting

television as tuner:

channel 6	- Taso 3 -	snowy, same as with VCR
channel 8	- Taso 4 -	herringbone pattern
channel 12	- Taso 2 -	good picture
channel 15	- Taso 3 -	slight ghosting

Television reception with KOKS off air:
television as tuner:

channel 6	- Taso 3 -	slight improvement
channel 8	- Taso 3 -	decent picture
channel 12	- Taso 2 -	good
channel 15	- Taso 3 -	decent

They also have a portable Zenith television only on rabbit ears. The filter improved reception on all channels except channel 6.

The Grays also have an early 1970's Magnavox stereo. They are receiving a loud electrical buzzing on the AM band. They thought it was caused by KOKS. The buzz is still there with KOKS off the air. They also are receiving the audio from KOKS on the lower portion of the FM band, but their main concern is the buzzing on the AM.

Summary: The Gray's need to replace their twin lead wire with coaxial cable as well as installing a rotor and FM trap filter to improve their reception of the wanted signals.

Mr. & Mrs. Pat Smittle: 1:30 pm Wednesday, December 13, 1989

They have a Sylvania television. There are two antennas, one just for channel 8, connected to a combiner, to the splitter, then to the television. The antenna for channel 8 is pointed towards Jonesboro, while the other antenna is pointed towards Cape Girardeau. They are using twin lead and have a Radio Shack filter installed.

Television reception with KOKS on the air:

channel 6	- Taso 3 -	no color
channel 8	- Taso 3 -	grainy, fair picture
channel 12	- Taso 2 -	good picture
channel 15	- Taso 3 -	ghosting

Television reception with KOKS off the air:

channel 6	- Taso 3 -	color, otherwise no change
channel 8	- Taso 3 -	snowy, grainy
channel 12	- Taso 2 -	good picture
channel 15	- Taso 3 -	ghosting

The Smittles stated once KOKS came on the air, they started to get ghosting on channel 15. The ghosting is still present with KOKS off the air. There is also electrical type flashes on channel 6.

Summary: This system requires the installation of coaxial cable in order to receive the quality of picture desired.

Wayne and Kathy Kearby: 4:00 pm Wednesday, December 13, 1989

The Kearby's have coax run from the antenna to the set. The coax wires are connected to a clothespin type connector, hooked on to screw terminals on the television. There is not a balun in line, so there is an impedance mismatch. One wire of a stub filter was attached to one terminal of the connector but the other wire hung loose. Once the stub tuned filter was re-attached, it helped channel 12 reception.

The television is an older model and has several problems. The vertical deflection is incorrect so the picture does not fill the screen and the tuner is malfunctioning allowing channel 6 to be received on channel 5.

Television reception with KOKS on the air:

channel 6	- Taso 3 -	snowy
channel 8	- Taso 4 -	extreme snow
channel 12	- Taso 3 -	grainy
channel 15	- Taso 3 -	slight ghosting

Television reception with KOKS off the air:

channel 6	- Taso 3 -	snowy
channel 8	- Taso 4 -	extreme snow
channel 12	- Taso 2 -	good picture
channel 15	- Taso 3 -	slight ghosting

Summary: The installation of an F-connector, balun and filter would eliminate the impedance mismatch thus improving the quality of picture they are receiving.

Mike and Annie Pennington: 7:00 pm Wednesday, December 13, 1989

They live in a mobile home park (owned by the Hillis'). They have a Zenith 19" television with rabbit ears. They stated their reception has been better the last couple of weeks. They have been able to record on their VCR the last couple of weeks also. They were not getting anything but channel 15 and 15 had a very poor picture. Once in a while would receive KOKS on channel 6.

Television reception with KOKS on the air:

channel 6	- Taso _ -	no picture
channel 8	- Taso 4 -	extreme herringbone and snow
channel 12	- Taso 4 -	snow, some herringbone
channel 15	- Taso 3 -	decent picture, slight ghosting

Television reception with KOKS off the air:

channel 6	- Taso 5 -	no picture
channel 8	- Taso 3 -	less herringbone and less snow
channel 12	- Taso 3 -	very snowy
channel 15	- Taso 3 -	good picture, slight ghosting

During the last year, the Penningtons did move the television from in front of a window to the middle of the trailer. This could hinder what signal they were getting. There are no pictures of the Pennington's antenna system since it is just rabbit ears.

Summary: The Pennington's need an antenna system. With an outside antenna, rotor, coaxial cable and filter, they could receive the television stations they now lack.

ADDITIONAL INFORMATION

Charles Lampe, chief engineer for KOKS, was contacted by phone. There are a couple of filters that he is using. One is from Radio Shack and is an in-line FM trap. The other is a Channel Master (model # 09503) notch tunable trap. When people have their antenna system run through a VCR, it causes problems. He tells the complainants with twin lead to install coax. He has not found a filter that will work well with twin lead.

He offered to work with Mrs. Smith last winter when he first took the chief engineer position. Mrs. Smith refused.

Mr. Lampe has had to install a pre-amp with a tunable notch filter at the residence of Mr. Steve Brooks to bring in channel 6. The filter reduced both the radio station signal and the signal for channel 6. In order to receive a viewable channel 6, Mr. Lampe put an amplifier in-line to increase the channel 6 signal level after it entered the filter. Mr. Brooks can now watch channel 6.

The Smiths and the Hillis', the two closest to the tower, both raised the question about possible hazardous affects on humans living that close to a broadcast tower. Mrs. Hillis has a metal plate in her arm. She has had this for many years. Since last summer, her arm has been swelling and causing her great discomfort. It has never done this before. She has checked with someone at the University of Missouri concerning the possibility of the radio waves from the tower causing this type of problem. She was told it was very possible.

Both Mrs. Smith and Mrs. Hillis were told to contact Dr. Robert Cleveland. His address and phone number have been sent to them along with OET Bulletin 56, Questions and Answers About Biological Effects and Potential Hazards of Radiofrequency Radiation.

The Hillis' and Mrs. Smith called nearly every house before and after we had been there to find out what had been done. Because of this, the testing was done in a methodical fashion so they would be conducted the same in every household. The Smiths and Hillis' also must have given most of the people a list of questions. We were asked the same questions at almost every house in almost identical words.

PERSONAL COMMENTS

While the operation of station KOKS currently is the source of some interference to television reception in the Poplar Bluff area, there are additional reasons for the poor reception. This was evidenced by the poor picture quality when KOKS ceased transmitting.

Many of the homes in the area are using 300 ohm twin lead between the antennas and televisions. Often there are several connections or splices in the line. The signal loss associated with these connections results in a very low level of television signal actually reaching the set.

The ability to rotate the antenna had a direct impact on the quality of picture received. Proper positioning of the antenna aided in eliminating ghosting and improved the signal level of the desired television channel.

In only one home visited was the installation of filters particularly effective. That home, however, was the only home in which coaxial cable had been used exclusively. In that case, the installation of an FM trap filter and the redirection of the antenna produced a television picture of the same quality as that received when KOKS was not transmitting.

While KOKS has not made an effort to resolve interference to FM receivers, this did not appear to be a major concern of the complainants. In only one home were we told of a specific station that could not be received due to the operation of KOKS.

It is the opinion of Karen Raines and Michael Moffitt that the installation of coaxial cable, FM trap filters and rotors will virtually eliminate the interference attributed to the operation of KOKS. This installation should also eliminate many of the other reception problems.

CONCLUSION

The tests conducted in the Poplar Bluff area found several sources for poor television reception in addition to that which could be attributed to the operation of KOKS. Improperly installed antennas systems, malfunctioning receivers, electrical interference, interference from two-way transmitters operating in the 42 MHz range, and absence of antenna rotors all contributed to the poor reception.

To provide good reception to the complainants will require the installation of 75 ohm coaxial cable, antenna rotors, and in-line FM traps. The tests conducted showed that such an installation will eliminate interference attributed to KOKS.

G. Michael Moffitt
Electronics Engineer

Karen L. Raines
Public Service Specialist

ATTACHMENTS

INSPECTION NOTES OF KOKS
INSPECTED 12/12/89

Prior to contacting anyone connected with the station, off-the-air measurements were made of KOKS. Modulation measurements were taken using a Watkins Johnson 8617 receiver connected to the oscilloscope portion of an IFR 1500. The modulation was measured to be 94% at 9:05 a.m. and 96% at 9:25 a.m.

At a distance of approximately 1/2 mile from the KOKS transmitter, field strength and harmonic measurements were taken. The second harmonic was suppressed 89.9 dB. The fundamental signal was measured to be 44 mV/m. (The field strength measurement was repeated from the same location on 12/13/89 and was found to still be 44 mV/m).

At the time of the inspection, the station had a licensed control operator on duty. During the course of running tests with the complainants, it was learned that the station kept the transmitter in operation after signing off for the day. Mrs. Stewart confirmed that the transmitter was being left on twenty-four hours a day. After midnight, however, there was no control operator. I informed her of the requirement to have a control operator on duty at all times the transmitter is in operation, and the requirement to identify.

No other violations were detected in the station inspection.

BROADCAST INSPECTION DATA SUMMARY (11/26/86 Version)

Call Sign KOKS Type (check any that apply) __ AM ✓ FM ✓ EdFM __ TV __ BSPP __ CPCS-1
Location PILLAR BLUFF, MO Licensee CALVARY EDUCATIONAL BROADCASTING NETWORK

Outside Inspection Inspection Date 12/12/89 Office/Inspector KC 16MM

Tower Lights Functioning? ✓ Yes __ No - Specifics _____
Tower Painting OK? ✓ Yes __ No - Specifics _____
AM - Antenna Ground OK? __ Yes __ No - Specifics N/A
AM - Fencing OK? __ Yes __ No - Specifics N/A
Facilities appear as Authorized? ✓ Yes __ No __ Unsure - Specifics _____

Inside - Control & Records Inspection Date 12/12/89 Office/Inspector KC 16MM

On duty Operator? ✓ Yes __ No - Specifics ~~ARE CHANGES WORKED~~ SEE ATTACHED NOTES
Adequate Meters/Warnings? ✓ Yes __ No - Specifics _____
Transmitter Control? ✓ Yes __ No - Specifics _____
Public File? ✓ OK __ No file __ Items Missing - Specifics _____

Authorizations Available? ✓ Yes __ No - Specifics _____
Operating as Authorized? ✓ Yes __ No - Specifics _____

EBS/BSPP (Record BSPP notes on Loan Agreement) Inspection Date 12/12/89 Office/Inspector KC 16MM

Current Checklist? ✓ Yes __ No - Specifics _____
Current Authenticator? ✓ Yes __ No - Specifics _____
EBS Monitor - Present? ✓ Yes __ No - Specifics _____
Functioning? ✓ Yes __ No - Specifics _____
Tuned to Correct Station? ✓ Yes __ No - Specifics KWRC
Tests received per Log? ✓ Yes __ No - Specifics SOMETIMES THEY HAVE TO CALL KWRC TO HAVE THEM RUN TEST
EBS Generator - Present? ✓ Yes __ No - Specifics _____
Functioning? ✓ Yes __ No - Specifics _____
Tests Conducted? ✓ Yes __ No - Specifics _____
Tests on Log? ✓ Yes __ No - Specifics _____

Technical Operation Inspection Date 12/12/89 Office/Inspector KC 16MM

Frequency OK? ✓ Yes __ No - Specifics: Authorized 89.5 MHz Measured 89.5007 MHz

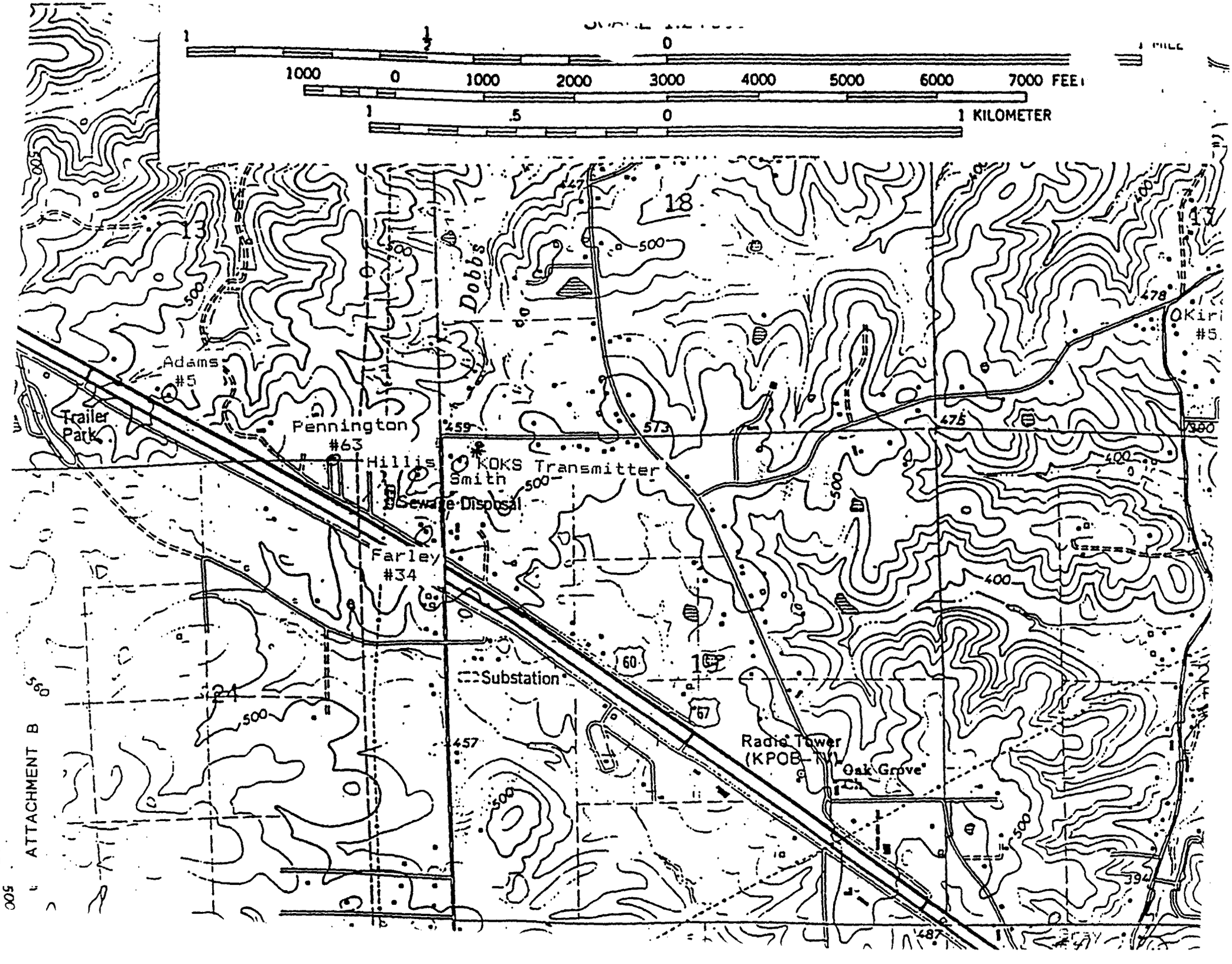
Modulation OK? ✓ Yes __ No - Specifics 94% AT 9:05AM 96% AT 9:25AM
Spurious/Harmonic Emissions OK? ✓ Yes __ No - Specifics (include frequency and dB suppressed)
2ND HARMONIC SUPPRESSED 89.9 dB
Power OK? ✓ Yes __ No - Specifics: Authorized 100 K watts Operating with 98.5 K watts

AM DA Parameters OK? __ Yes __ No - Specifics (indclude authorized value, reading, tolerance)
N/A
AM Monitoring Points OK? __ Yes __ No - Specifics (include authorized value, reading)
N/A

Violations Notices Issued (check any that apply) _____ Advisory _____ 790-II _____ 793 _____ NAL

Inspection Expenses - _____ Hours On Scene _____ Hours Collateral _____ $ Travel Expended

Complaints - Was station inspected as a result of a complaint or referral? _____ No ✓ Yes
If yes, details of complaint: WASHINGTON REQUESTED INSPECTION/INVESTIGATION TO RESOLVE COMPLAINTS OF BLANKETING INTERFERENCE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18
13
24
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Dobbs
Adams #5
Trailer Park
Pennington #63
Hillis
Smith
Sewage Disposal
KOKS Transmitter
Farley #34
Substation
Radio Tower (KPOB-TV)
Oak Grove Ch
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67
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457
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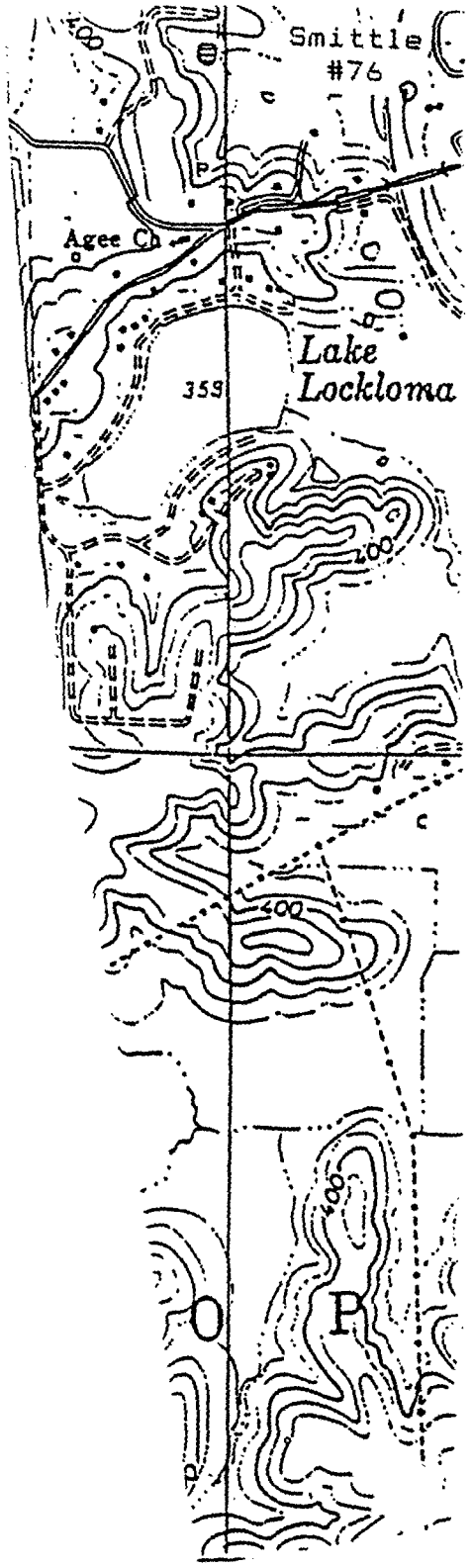
500
400
ATTACHMENT B


Smittle
#76
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Lake
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359
200
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